Subject: Re: vertical line that moves with cursor in draw widget Posted by Jean H. on Fri, 06 Jun 2008 21:28:05 GMT

View Forum Message <> Reply to Message

cgoethel@igpp.ucla.edu wrote:

- > Hello, I have a draw_widget with motion events set up. I draw a
- > vertical line (using plots) which follows the cursor as it moves
- > through the draw area. I can get the vertical line to follow the
- > cursor easily enough but I can't seem to figure out how to erase the
- > previous lines. All the lines remain drawn. Any suggestions?
- > Thanks! Cindy

re-draw your image / data plots.. or use "erase" if you have nothing on the draw area.

Jean

Subject: Re: vertical line that moves with cursor in draw widget Posted by Rick Towler on Fri, 06 Jun 2008 21:55:12 GMT View Forum Message <> Reply to Message

caoethel wrote:

- > Hello, I have a draw_widget with motion events set up. I draw a
- > vertical line (using plots) which follows the cursor as it moves
- > through the draw area. I can get the vertical line to follow the
- > cursor easily enough but I can't seem to figure out how to erase the
- > previous lines. All the lines remain drawn. Any suggestions?

The easiest way is to redraw your background before you draw the new vertical line in your motion event handler. Depending on what your doing this can be quite costly in direct graphics. If re-plotting is too slow you can create a copy of your draw widget background (using something like tvread from www.dfanning.com) and simply re-draw this image instead of running thru all of your plotting code. Either way you'll want to work hard to minimize the drawing to only when it is absolutely necessary.

The best way to do this is to use object graphics which is far better suited for this type of application. The problem here is that there's a bit of a learning curve...

-Rick

Subject: Re: vertical line that moves with cursor in draw widget Posted by ben.bighair on Sat, 07 Jun 2008 02:51:14 GMT

On Jun 6, 5:14 pm, cgoet...@igpp.ucla.edu wrote:

- > Hello, I have a draw_widget with motion events set up. I draw a
- > vertical line (using plots) which follows the cursor as it moves
- > through the draw area. I can get the vertical line to follow the
- > cursor easily enough but I can't seem to figure out how to erase the
- > previous lines. All the lines remain drawn. Any suggestions?
- > Thanks! Cindy

Hi,

If you are using direct graphics, then your best bet is create a "pixmap" copy of the window contained inthe draw widget. Then use the DEVICE, copy = [blah, blah, blah...] to copy the contents of the pixmap quickly to the the exposed draw window. This is pretty fast and less expensive than trying to erase before plotting.

Here's an example. [By the way, you should consider buying on the of the many fine intro to IDL books available. I like them all.]

Cheers, Ben

PRO PLOT_EXAMPLE_DRAW_EVENT, ev

WIDGET_CONTROL, ev.id, GET_UVALUE = info

WSET, info.drawWin DEVICE, copy = [0,0, info.dim[0], info.dim[1], 0,0, info.pixWin]

xy = CONVERT_COORD(ev.x, ev.y, /DEVICE, /TO_DATA)

PLOTS, [xy[0], xy[0]], !Y.CRANGE PLOTS, !X.CRANGE, 30 + 5*[xy[0],xy[0]] - 11*([xy[0],xy[0]])^2 END

PRO PLOT EXAMPLE

xsize = 400ysize = 400

tlb = WIDGET_BASE()
drawID = WIDGET_DRAW(tlb, \$
xsize = xsize, ysize = ysize, MOTION_EVENTS = 1, \$

EVENT PRO = "PLOT EXAMPLE DRAW EVENT") WINDOW,/FREE, xsize = xsize, ysize = ysize, /PIXMAP pixWin = !D.window WIDGET CONTROL, tlb, /REALIZE WIDGET_CONTROL, drawID, GET_VALUE = drawWin WSET, drawWin x = FINDGEN(100) - 50 $y = 30 + 5*x - 11*(x^2)$ PLOT, x,y WSET. pixWin DEVICE, COPY = [0,0,xsize, ysize, 0,0, drawWin] info = {DRAWID: drawID, \$ drawWin: drawWin, \$ pixWin: pixWin, \$ dim: [xsize, ysize]} WIDGET CONTROL, drawID, SET UVALUE = info XMANAGER, "PLOT_EXAMPLE", tlb **END**

Subject: Re: vertical line that moves with cursor in draw widget Posted by Craig Markwardt on Sat, 07 Jun 2008 07:49:24 GMT View Forum Message <> Reply to Message

cgoethel@igpp.ucla.edu writes:

- > Hello, I have a draw_widget with motion events set up. I draw a
- > vertical line (using plots) which follows the cursor as it moves
- > through the draw area. I can get the vertical line to follow the
- > cursor easily enough but I can't seem to figure out how to erase the
- > previous lines. All the lines remain drawn. Any suggestions?
- > Thanks! Cindy

Hello--

My personal favorite would be to use the DEVICE, SET_GRAPHICS_FUNCTION= function to change to XOR drawing mode. In this mode you should be able to draw the line once to make it appear and then repeat the operation to make it disappear.

Something like,

DEVICE, GET_GRAPHICS_FUNCTION=oldg, SET_GRAPHICS_FUNCTION=6 ;; Erase previous symbol

if n_elements(old_posx) then plots, old_posx, old_posy ;; Plot new symbol plots, new_posx, new_posy DEVICE, SET_GRAPHICS_FUNCTION=oldg ;; Save the new position for the next call old posx = new posxold_posy = new_posy Good luck! Craig Craig B. Markwardt, Ph.D. EMAIL: craigmnet@REMOVEcow.physics.wisc.edu Astrophysics, IDL, Finance, Derivatives | Remove "net" for better response ______

Subject: Re: vertical line that moves with cursor in draw widget Posted by Michael Galloy on Sun, 08 Jun 2008 22:56:30 GMT

View Forum Message <> Reply to Message

cgoethel@igpp.ucla.edu wrote:

- > Hello, I have a draw_widget with motion events set up. I draw a
- > vertical line (using plots) which follows the cursor as it moves
- > through the draw area. I can get the vertical line to follow the
- > cursor easily enough but I can't seem to figure out how to erase the
- > previous lines. All the lines remain drawn. Any suggestions?
- > Thanks! Cindy

Use a pixmap (created with "window, /pixmap"). All drawing that you currently do should go to the pixmap. Then copy the pixmap to the actual draw window (with "device, copy=r"). This copy can be done very quickly. Finally draw your lines on that. Every time the cursor moves, copy the pixmap again and draw the new lines.

Mike

www.michaelgalloy.com **Tech-X Corporation** Software Developer II